

composition comprising a polypeptide comprising the amino acid residues 21 to 49 of SEQ ID NO:3.

41. The method of claim 40, wherein the polypeptide comprises the amino acid residues 1 to 49 of SEQ ID NO:3.

42. The method of claim 40, wherein the polypeptide comprises the amino acid residues 21 to 157 of SEQ ID NO:3.

43. The method of claim 40, wherein the polypeptide comprises the amino acid residues 1 to 157 of SEQ ID NO:3.

44. The method of claim 40, wherein the polypeptide comprises the amino acid residues 21 to 419 of SEQ ID NO:3.

45. The method of claim 40, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:3.

46. The method of claim 40, wherein the Flt4-expressing cell is *in vitro*.

47. The method of claim 40, wherein the Flt4-expressing cell is *in vivo*.

48. The method of claim 47, wherein the Flt4-expressing cell is an endothelial cell.

49. The method of claim 48, wherein the endothelial cell is in lymphatic endothelia.

50. A method for promoting growth of endothelial cells that express the flt4 tyrosine kinase receptor, comprising contacting the cells with a polypeptide comprising the amino acid residues 21 to 49 of SEQ ID NO:3, in an amount effective to promote the growth of the endothelial cells.

51. The method of claim 50, wherein the polypeptide comprises the amino acid residues 1 to 49 of SEQ ID NO:3.

52. The method of claim 50, wherein the polypeptide comprises the amino acid residues 21 to 157 of SEQ ID NO:3.

53. The method of claim 50, wherein the polypeptide comprises the amino acid residues 1 to 157 of SEQ ID NO:3.

54. The method of claim 50, wherein the polypeptide comprises the amino acid residues 21 to 419 of SEQ ID NO:3.

55. The method of claim 50, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:3.

56. The method of claim 50, wherein the endothelial cells are *in vivo*.

57. The method of claim 56, wherein the endothelial cells are in lymphatic endothelia.

58. A method for modulating a dysfunctional state in a mammalian subject characterized by lack of activation of the Flt4 tyrosine kinase receptor, comprising administering to the subject a polypeptide comprising the amino acid residues 21 to 49 of SEQ ID NO:3, in an amount effective to activate the Flt4 receptor, thereby modulating the dysfunctional state in the mammalian subject.

59. The method of claim 58, wherein the polypeptide comprises the amino acid residues 1 to 49 of SEQ ID NO:3.

60. The method of claim 58, wherein the polypeptide comprises the amino acid residues 21 to 157 of SEQ ID NO:3.

61. The method of claim 58, wherein the polypeptide comprises the amino acid residues 1 to 157 of SEQ ID NO:3.

62. The method of claim 58, wherein the polypeptide comprises the amino acid residues 21 to 419 of SEQ ID NO:3.

63. The method of claim 58, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:3.

64. The method of claim 58, wherein the mammalian subject is human.--

II. REMARKS

Claims 32-36 have been canceled without prejudice. New claims 40-64 are introduced. With respect to canceled claims and all amendments, Applicants have not dedicated or abandoned any unclaimed subject matter and moreover have not acquiesced to any rejections and/or objections made by the Office Action. Applicants reserve the right to pursue prosecution of any presently excluded claim embodiments in future continuation and/or divisional applications.

The newly filed claims find support in the claims as originally filed and throughout the specification. For example, claims 40 to 49 are directed to the subject matter that was originally